

## Updated Summary NIPA Methodologies

THIS REPORT PRESENTS summary descriptions of the principal source data and estimating methods used to prepare the current-dollar estimates of gross domestic product (GDP) and the estimates of real GDP.<sup>1</sup> These descriptions have been updated to reflect the methodological improvements that were introduced in the annual revision of the national income and product accounts (NIPA's) that was released in July 1997.<sup>2</sup>

### Current-dollar estimates

**Table 1** lists the components of current-dollar GDP starting with the components on the product side and proceeding to those on the income side. The subcomponents, with their dollar values for 1996, are grouped according to the methodology used to prepare them.

The column for the annual estimates covers the revision cycle for those estimates and notes the major differences in methodology as the estimates move through the three annual revisions to a benchmark revision.<sup>3</sup> For example, for "most goods" in personal consumption expenditures (the first item on the product side), the table indicates one methodology for benchmark years and another for all other years.

The column for the quarterly estimates covers only the advance estimate for the current quarter—that is, the estimate prepared about a month after the end of the quarter. That estimate, rather than the preliminary or final quarterly estimate, is described because more attention focuses on the "first look" at the quarter. In addition, the column lists only the source data and methods; it does not indicate how many months of source data are available or whether the data are subject to revision by the source agency. Information on the key monthly source data appears each month in the "Business Situation" in the SURVEY OF CURRENT BUSINESS. Additional information on the monthly source data used for the advance estimate is available online from the Department of Commerce's Economic Bulletin Board.<sup>4</sup>

The source data listed consist of a variety of economic measures, such as sales or receipts, wages and salaries, unit sales, housing stock, insurance premiums, expenses, interest rates, mortgage debt, and tax collections. For most components, the source data

are "value data"; that is, they encompass both the quantity and price dimensions that are required for current-dollar estimates. In these cases, the methodology indicated in **table 1** covers only the adjustment of the value data to derive estimates consistent with NIPA definitions and coverage.

For those estimates not derived from value data, the table indicates the combination of data with separate quantity and price dimensions that is used to derive the required value estimate and the major adjustments needed to derive estimates consistent with NIPA definitions and coverage. On the product side, a "physical quantity times price" method is used for several components. For example, the estimate for new autos is calculated as unit sales times expenditure per auto (the average list price with options, adjusted for transportation charges, sales tax, dealer discounts, and rebates). On the income side, an "employment times earnings times hours" method and variations of a "stock of assets/liabilities times an effective interest rate" method are used for several components.

Some of the source data shown in **table 1** for the annual estimates are used as indicators to interpolate and extrapolate the levels established by source data that are more comprehensive, and all of the source data shown for the advance quarterly estimates are used to extrapolate the level of the preceding quarter. In addition, extrapolation and interpolation may be based on trends, as is the case when "judgmental trend" is listed in the table.<sup>5</sup>

**Estimating methods.**—**Table 1** refers to four methods—commodity flow, retail control, perpetual inventory, and fiscal year analysis—used by BEA for estimating specific components.

The commodity-flow method is used to obtain the value of final users' purchases of goods and services (that is, commodities) for BEA's benchmark input-output accounts. These values serve as the benchmark for the NIPA estimates of personal consumption expenditures (PCE), of producers' durable equipment (PDE), and of the commodity detail for State and local government consumption expenditures and gross investment.<sup>6</sup> This method is also used for PDE in nonbenchmark years, but it is implemented in an abbreviated form. An even more abbreviated commodity-flow method is used for current quarterly estimates of PDE.

5. For a few components, the final quarterly estimates are based on newly available source data that replace judgmental trends.

6. For additional information on the commodity-flow method, see U.S. Department of Commerce, Bureau of Economic Analysis, *Personal Consumption Expenditures*, Methodology Paper Series MP-6 (Washington, DC: U.S. Government Printing Office, 1990): 31-34; and U.S. Department of Commerce, Bureau of Economic Analysis, *GNP: An Overview of Source Data and Estimating Methods*, Methodology Paper Series MP-4 (Washington, DC: U.S. Government Printing Office, 1987): 16-17.

1. BEA has prepared a series of papers that provide detailed descriptions of NIPA concepts and methodologies. The methodologies described in these papers are subject to periodic improvements, which are typically introduced as part of annual and comprehensive revisions; these improvements are described in the articles in the SURVEY OF CURRENT BUSINESS that cover these revisions. For more information; see appendix B at the back of this issue.

2. See "Annual Revision of the National Income and Product Accounts," SURVEY 77 (August 1997): 6-32.

3. For additional details on the release schedule for the NIPA estimates, see "A Look at How BEA Presents the National Income and Product Accounts," SURVEY 76 (May 1996): 33-37.

4. For information about the Economic Bulletin Board, call STAT-USA at 1-800-782-8872.

The retail-control method is used to estimate over one-third of the value of PCE for periods other than benchmark years. This method provides the indicator series used in extrapolating and interpolating the total of “most goods” and the “control” total to which the PCE categories and residential PDE included in this group must sum. These PCE categories consist of all goods except autos and trucks, food furnished to employees, food and fuel produced and consumed on farms, standard clothing issued to military personnel, school lunches, and net foreign remittances.<sup>7</sup>

The perpetual-inventory method is used to derive estimates of fixed capital stock, which in turn form the basis for the estimates of consumption of fixed capital. This method is based on investment flows and a geometric depreciation formula; it is used instead of direct measurement of the capital stock because direct measurement is seldom statistically feasible on a comprehensive basis.<sup>8</sup>

The fiscal year-analysis method provides the framework for the annual and quarterly estimates of Federal Government consumption expenditures and gross investment. The estimates of expenditures are prepared by program—that is, by activity for a group of line items or for an individual line item in the Budget of the U.S. Government. For most programs, the fiscal year analysis begins by adjusting budget outlays for coverage and for netting and grossing differences between these outlays and NIPA expenditures. The expenditures total (as adjusted) for a program is then classified by type of NIPA expenditure—for example, transfer payments and interest paid—with nondefense consumption expenditures and gross investment determined residually. When a fiscal year analysis is completed, the detailed array of NIPA expenditures by program and by type of expenditure serves as a set of control totals for the quarterly estimates.<sup>9</sup>

**Balance of payments accounts.**—The source data for the foreign transactions reflected in most NIPA components—such as net exports of goods and services and rest-of-the-world corporate profits—are the balance of payments accounts (BPA's), which are also prepared by BEA.<sup>10</sup> As noted in table 1, for some NIPA components, the BPA estimates are adjusted to

conform to NIPA concepts and definitions.<sup>11</sup> Annual estimates of these adjustments and their definitions are shown in NIPA table 4.5, which was last published in the August 1997 SURVEY on page 82; summary quarterly estimates are shown in “Reconciliation Tables” in appendix A of the SURVEY.

**Other information.**—In preparing the annual estimates of several of the income-side components, BEA adjusts the source data for various coverage and conceptual differences. For each subcomponent listed below, an annual NIPA table reconciles the value published by the source agency with the NIPA value published by BEA and identifies the BEA adjustments. The following is a list of the subcomponents and their corresponding reconciliation tables, which appear in this issue on pages 34–36: Wages and salaries, table 8.25; farm proprietors' income, table 8.22; nonfarm proprietors' income, table 8.21; corporate profits, table 8.23; net interest, table 8.24; and consumption of fixed capital, table 8.20.

### Real estimates

Table 2 shows which one of three methods—deflation, quantity extrapolation, and direct base-year valuation—is used to prepare the quantity index for each detailed product-side component of real GDP and identifies the source data with which the method is implemented.<sup>12</sup> Deflation is used for most of the detailed components. In deflation, the quantity index is obtained by dividing the current-dollar index by an appropriate price index that has the base year—currently 1992—equal to 100 and then by multiplying the result by 100.

The quantity-extrapolation and direct-base-year-valuation methods are similar in that they both use explicit quantity data. In quantity extrapolation, quantity indexes are obtained by using a quantity indicator to extrapolate from the base-year value of 100 in both directions. In direct-base-year valuation, quantity indexes are obtained by multiplying the base-year price by actual quantity data for the index period and then expressing the result as an index with the base year equal to 100.

The subcomponents in table 2 are the same as those shown in table 1, but the detail differs to highlight the alternative methodologies used for calculating the real estimates.<sup>13</sup>

### Tables 1 and 2 follow.



the annual BPA revisions, most recently in “U.S. International Transactions, Revised Estimates for 1974–96,” SURVEY 77 (July 1997): 43–55.)

11. These adjustments are described in U.S. Department of Commerce, Bureau of Economic Analysis, *Foreign Transactions, Methodology Paper Series MP-3* (Washington, DC: U.S. Government Printing Office, 1987): 15–25.

12. For additional information on the calculation of real GDP, see appendix A in this issue; “A Look at How BEA Presents the National Income and Product Accounts,” 35–37; “BEA's Chain Indexes, Time Series, and Measures of Long-Term Economic Growth,” SURVEY 77 (May 1997): 58–68; and “Annual Revision of the National Income and Product Accounts,” 29–30.

13. For the real estimates, the distinction between annual and quarterly methodologies is far less important than it is for the current-dollar estimates. For the relatively few cases in which the annual and quarterly source data differ, the major differences are noted in the entry.

7. For additional information, see *Personal Consumption Expenditures*, 41–54; and *GNP: An Overview*, 17.

8. For additional information on the perpetual-inventory method, see U.S. Department of Commerce, Bureau of Economic Analysis, *Fixed Reproducible Tangible Wealth in the United States, 1925–89* (Washington, DC: U.S. Government Printing Office, January 1993): M-2–M-15; and *GNP: An Overview*, 17–18. For additional information on the geometric depreciation formula, see “Improved Estimates of Fixed Reproducible Tangible Wealth, 1929–95,” SURVEY 77 (May 1997): 69–92.

9. For additional information and an illustration of the fiscal year-analysis method, see U.S. Department of Commerce, Bureau of Economic Analysis, *Government Transactions*, Methodology Paper Series MP-5 (Washington, DC: U.S. Government Printing Office, 1988): 19–20.

10. See U.S. Department of Commerce, Bureau of Economic Analysis, *The Balance of Payments of the United States: Concepts, Data Sources, and Estimating Procedures*, (Washington, DC: U.S. Government Printing Office, 1990). (The methodologies described in this publication are subject to periodic improvements, which are typically introduced as part of the annual revision of the BPA's; these improvements are described in the SURVEY articles that cover

Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other years or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Product side</b> (GDP of \$7,636.0 billion for 1996)			
<b>Personal consumption expenditures</b> (\$5,207.6)	<b>Durable and nondurable goods:</b> (\$2,169.2) <sup>1</sup>		
	Most goods (except sub-components listed separately) (\$1,821.0)	Benchmark years—Commodity-flow method, starting with manufacturers' shipments from Census Bureau quinquennial census and including an adjustment for exports and imports from Census Bureau foreign trade data. Other years—Retail-control method, using retail trade sales from Census Bureau annual survey or, for most recent year, monthly survey of retail trade.	Same as annual for most recent year.
	New autos (\$86.1)	Physical quantity purchased times average retail price: Unit sales, information to allocate sales among consumers and other purchasers, and average list price with options, adjusted for transportation charges, sales tax, dealer discounts, and rebates, all from trade sources.	Same as annual.
	Net purchases of used autos (\$55.2)	Benchmark years—For net transactions, change in the consumer stock of autos from trade sources. For dealers' margin, retail sales from Census Bureau quinquennial census and margin rate from Census Bureau annual survey of retail trade. Other years except most recent—For net transactions, same as benchmark years. For dealers' margin, franchised dealers' unit sales times sales price, both from trade sources, times margin rate for independent dealers from Census Bureau annual survey; independent dealers' margin from Census Bureau annual survey. Most recent year—For net transactions, same as benchmark years. For dealers' margin, for franchised dealers, unit sales and sales price from trade sources; for independent dealers, sales from Census Bureau monthly survey of retail trade.	For net transactions, residual based on net sales by other sectors. For dealers' margin, unit sales of franchised dealers from trade source and sales price from Bureau of Labor Statistics consumer price index for used cars.
	New trucks (\$63.7)	Benchmark years—Commodity-flow method, starting with manufacturers' shipments from Census Bureau quinquennial census and including an adjustment for exports and imports from Census Bureau foreign trade data. Other years except most recent—Abbreviated commodity-flow method, starting with manufacturers' shipments from Census Bureau annual survey and including an adjustment for exports and imports from Census Bureau foreign trade data. Most recent year—Physical quantity purchased times average retail price: Unit sales and information to allocate sales among consumers and other purchasers from trade sources and average price based on Bureau of Labor Statistics consumer price index for new trucks.	Same as annual for most recent year.
	Gasoline and oil <sup>2</sup> (\$122.6)	Benchmark years—Physical quantity purchased times average retail price: Gallons consumed from the Department of Transportation, information to allocate that total among consumers and other purchasers from Federal agencies and trade sources, and average retail price from Census Bureau quinquennial census. Other years except most recent—Same as benchmark years, except average retail price from the Energy Information Administration. Most recent year—Physical quantity purchased times average retail price: Gallons consumed and average price, both from the Energy Information Administration.	Same as annual for most recent year.

Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other years or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Product side</b> (GDP of \$7,636.0 billion for 1996)—Continued			
<b>Personal consumption expenditures—Continued</b>	<b>Durable and nondurable goods—Continued:</b>		
	Food furnished to employees (including military) (\$8.7)	Benchmark years—For commercial employees, number of employees of appropriate industries from Bureau of Labor Statistics tabulations times BEA estimate of per capita expenditures for food; for military personnel, outlays from the <i>Budget of the United States</i> prepared by the Office of Management and Budget. Other years—Same as benchmark years, except per capita expenditures for food based on Bureau of Labor Statistics consumer price index for food.	For commercial employees, same as annual for other years; for military personnel, judgmental trend.
	Expenditures abroad by U.S. residents (\$2.6) less personal remittances in kind to non-residents (\$1.2)	Estimated as part of the balance of payments accounts; see entry for "exports and imports of services, net," under net exports of goods and services.	Judgmental trend.
	<b>Services:</b> (\$3,038.4)		
	Nonfarm dwellings—space rent for owner-occupied and rent for tenant-occupied (\$752.0)	Benchmark years—Based on data on housing stock and average annual rent from Census Bureau decennial census of housing and residential finance survey, adjusted for utilities billed with rent. Other years—Based on data on housing stock and average annual rent from Census Bureau biennial housing survey or on the number of households from Census Bureau monthly current population survey and Bureau of Labor Statistics consumer price index for rent.	Same as annual: For housing stock, judgmental trend; for average rent, Bureau of Labor Statistics consumer price index for rent.
	Rental value of farm dwellings (\$6.1)	Benchmark years—Based on data on housing stock and average annual rent from Census Bureau decennial census of housing and survey of residential finance. Other years—Based on data on net value of real farm housing stock from BEA capital stock series.	Judgmental trend.
	Motor vehicle and other repair, other purchased intercity transportation, legal and funeral services, barbershops and beauty parlors, nursing homes, laundries, employment agency fees, accounting and tax return preparation services, recreation (except cable TV, casino gambling, parimutuel net receipts, and lotteries), hotels and motels, and other education and research (\$508.1)	Benchmark years—Receipts and expenses from Census Bureau quinquennial census adjusted for receipts from business and governments. Other years—Receipts for spectator sports from trade sources; for legitimate theaters and other education and research, tabulations of wages and salaries of employees covered by State unemployment insurance from the Bureau of Labor Statistics; for others in this group, Census Bureau service annual survey.	For nursing homes, other education and research, employment agency fees, and clubs and fraternal organizations, wages and salaries derived from Bureau of Labor Statistics monthly employment times earnings times hours; for legitimate theaters and motion pictures, receipts from trade sources; for radio and TV repair, number of TV's based on stock and sales from trade source times Bureau of Labor Statistics consumer price index for appliance and furniture repair; for hotels and motels, rooms rented times average price per room from trade source; for others in this group, judgmental trend.

See footnotes at end of table.

Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other final or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Product side</b> (GDP of \$7,636.0 billion for 1996)—Continued			
<b>Personal consumption expenditures—Continued</b>	<b>Services—Continued:</b>		
	Physicians, dentists, and other professional medical services (\$357.6)	Benchmark years—For nonprofit professional services, expenses, and for others in this group, receipts, adjusted for government consumption, all from Census Bureau quinquennial census. Other years—Receipts and revenues, adjusted for government consumption, from Census Bureau service annual survey.	For physicians and dentists, judgmental trend; for other professional medical services, wages and salaries derived from Bureau of Labor Statistics monthly employment times earnings times hours.
	Private nursery, elementary, and secondary schools, day care, welfare activities, and trade unions and professional associations (\$148.6)	Benchmark years—For religious-affiliated schools, enrollment from the Department of Education times BEA estimate of average expenditures per pupil; for nursery schools and day care, expenditures from Bureau of Labor Statistics consumer expenditure survey; for others in this group, receipts and expenses from Census Bureau quinquennial census. Other years except most recent—For nursery schools and day care, same as benchmark years; for others in this group, annual tabulations of wages and salaries of employees covered by State unemployment insurance from the Bureau of Labor Statistics. Most recent year—For nursery schools and day care, judgmental trend; for others in this group, tabulations of wages and salaries of employees covered by State unemployment insurance from the Bureau of Labor Statistics.	For political organizations and foundations, judgmental trend; for others in this group, wages and salaries derived from Bureau of Labor Statistics monthly employment times earnings times hours.
	Financial services furnished without payment by banks, credit agencies, and investment companies <sup>3</sup> (\$169.9)	See entry for "imputed—banks, credit agencies, and investment companies" under net interest.	Judgmental trend.
	Brokerage charges and investment counseling, bank service charges, intercity transportation except other, and private higher education (\$148.7)	Years except most recent—For private higher education, expenses, and for others in this group, receipts, all from annual reports of government administrative agencies. Most recent year—For brokerage charges, bank service charges, and intercity transportation, receipts, from annual reports of government administrative agencies; for private higher education, enrollment from the Department of Education times price index for higher education from trade source.	For stock brokerage charges, stock exchange transactions from trade sources; for income from sales of investment company securities, sales of open-end investment company shares from trade source; for other brokerage charges and investment counseling and for bank service charges, judgmental trend; for intercity transportation, receipts from trade sources; for private higher education, wages and salaries derived from Bureau of Labor Statistics monthly employment times earnings times hours.
	Domestic services (\$12.5)	Benchmark years—For cleaning services, receipts from Census Bureau quinquennial census; for other domestic services, number of workers times weekly hours times earnings from the Bureau of Labor Statistics. Other years—Number of workers times weekly hours times earnings from the Bureau of Labor Statistics.	Judgmental trend.

See footnotes at end of table.

**Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued**

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other years or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Product side (GDP of \$7,636.0 billion for 1996)—Continued</b>			
<b>Personal consumption expenditures—Continued</b>	<b>Services—Continued:</b>		
	Public higher education and hospitals, water and other sanitary services, and lotteries (\$157.7)	Years except most recent—For lotteries, net receipts from Census Bureau quinquennial census and annual surveys of State and local governments, adjusted to a calendar year basis from a fiscal year basis; for others in this group, receipts from the same sources. Most recent year—Judgmental trend.	Same as annual for most recent year.
	Insurance, private hospitals, religious activities, cable TV, utilities, and local transport (\$720.1)	Years except most recent—For life insurance, expenses from trade sources; for medical and hospitalization insurance, premiums and benefits from the Health Care Financing Administration; for other insurance, premiums and benefits from trade sources; for private hospitals, receipts and expenses from Census Bureau quinquennial census (benchmark year), and expenses from trade sources (other years); for religious activities, expenses based on contributions and membership from trade sources; for cable TV and utilities, receipts from government agencies and trade sources; for local transport, receipts from trade source. Most recent year—For life insurance, tabulations of wages and salaries of employees covered by State unemployment insurance from the Bureau of Labor Statistics; for insurance other than life insurance, judgmental trend; for religious activities, expenses based on population from the Census Bureau and per capita disposable personal income from BEA; for local transport, passenger trips from trade source times Bureau of Labor Statistics consumer price index for intra-city mass transit; for others in this group, same as other years.	For life insurance, hospitals, and religious activities, wages and salaries derived from Bureau of Labor Statistics monthly employment times earnings times hours; for electricity and gas, projected quantities based on degree-day data from the National Oceanic and Atmospheric Administration times price based on Bureau of Labor Statistics consumer price indexes for utilities; for others in this group, judgmental trend.
	Foreign travel by U.S. residents (\$54.9) less expenditures in the United States by nonresidents (\$82.7)	Estimated as part of the balance of payments accounts; see entry for "exports and imports of services, net," under net exports of goods and services.	Same as annual.
	Other services: Casino gambling, and parimutuel net receipts; other housing except hotels and motels; bridge, etc., tolls; other household operation except repairs and insurance; travel and entertainment card fees; stenographic and reproduction services; and money orders and classified advertising (\$85.0)	Various source data.	For casino gambling, receipts from State agency; for others in this group, judgmental trend.

See footnotes at end of table.

**Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued**

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other years or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Product side (GDP of \$7,636.0 billion for 1996)—Continued</b>			
<b>Fixed investment</b> (\$1,090.7)	<b>Nonresidential structures:</b> (\$215.2) <sup>4</sup>		
	Utilities: Telecommunications (\$11.9)	Value put in place from Census Bureau monthly construction survey.	Same as annual.
	Utilities: Other (\$21.4)	Expenditures from Federal regulatory agencies and trade sources.	Judgmental trend.
	Mining exploration, shafts, and wells (\$16.1)	Benchmark years—Expenditures from Census Bureau quinquennial census. Other years—For petroleum and natural gas, physical quantity times average price: Footage drilled and cost per foot from trade sources; for other mining, expenditures from Census Bureau surveys on capital expenditures.	For petroleum and natural gas, same as annual for other years; for mining, judgmental trend.
	Industrial buildings (\$32.1)	Benchmark years, except 1992—Value put in place from Census Bureau monthly construction survey and improvements from Department of Energy commercial buildings energy consumption survey. For 1992, tabulations from Census Bureau annual capital expenditure survey, adjusted for undercoverage. Other years—Value put in place from Census Bureau monthly construction survey.	Same as annual for other years.
	Other nonfarm buildings and structures (\$129.7)	Benchmark years—Value put in place from Census Bureau monthly construction survey and improvements from Department of Energy commercial buildings energy consumption survey. Other years—Value put in place from Census Bureau monthly construction survey.	Same as annual for other years.
	Farm buildings (\$3.7)	Expenditures for new construction from Department of Agriculture surveys.	Value put in place from Census Bureau monthly construction survey.
	<b>Nonresidential producers' durable equipment:</b> (\$566.2)		
	Equipment, except autos (\$520.9)	Benchmark years—Commodity-flow method, starting with manufacturers' shipments from Census Bureau quinquennial census and including an adjustment for exports and imports from Census Bureau foreign trade data. Other years—Abbreviated commodity-flow method, starting with manufacturers' shipments from Census Bureau annual survey or, for most recent year (except aircraft and trucks), monthly survey of manufactures and including an adjustment for exports and imports from Census Bureau foreign trade data. For aircraft, manufacturers' shipments from Census Bureau current industrial report, adjusted for exports and imports. For trucks, domestic and North American imports, physical quantity purchased times average retail price: Unit sales and information to allocate sales among business and other purchasers from trade sources and average price based on Bureau of Labor Statistics producer price indexes; for truck trailers, shipments from Census Bureau current industrial report.	For trucks, see entry for "new trucks" under personal consumption expenditures; for others in this group, same as annual for other years but with less detail.
	New and used autos (\$45.3)	For new autos, see entry for "new autos" under personal consumption expenditures; for used autos, change in business stock of autos at least 1 year old from trade source.	For new autos, same as annual; for used autos, judgmental trend.

See footnotes at end of table.

**Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued**

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other years or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Product side (GDP of \$7,636.0 billion for 1996)—Continued</b>			
<b>Fixed investment—Continued</b>	<b>Residential investment: (\$309.2)<sup>5</sup></b>		
	Permanent-site new single-family housing units (\$159.1)	Value put in place based on phased housing starts and average construction cost from Census Bureau monthly construction survey.	Same as annual.
	Permanent-site new multi-family housing units (\$20.3)	Value put in place from Census Bureau monthly construction survey.	Same as annual.
	Mobile homes (\$12.6)	Benchmark years—See entry for “equipment, except autos” under nonresidential producers’ durable equipment. Other years—Physical quantity shipped times price: Shipments from trade sources and average retail price from Census Bureau monthly survey.	Same as annual for other years.
	Improvements (\$74.4)	Expenditures by owner-occupants from Bureau of Labor Statistics quarterly consumer expenditure survey and by landlords from Census Bureau quarterly survey of landlords.	Judgmental trend.
	Brokers’ commissions (\$36.3)	Physical quantity times price times average commission rate: Number of single-family houses sold, mean sales price, and commission rates from Census Bureau monthly construction survey, Census Bureau biennial housing survey, and trade sources.	Same as annual.
	Producers’ durable equipment (\$7.5)	See entry for “most goods” under personal consumption expenditures.	Same as annual.
<b>Change in business inventories (\$25.9)</b>	Manufacturing and trade (\$18.0)	Benchmark years—Inventories from Census Bureau quinquennial censuses revalued to current replacement cost, using information on the proportions of inventories reported using different accounting methods, on the commodity composition of goods held in inventory, and on the turnover period, all from Census Bureau quinquennial censuses and surveys, combined with prices, largely based on Bureau of Labor Statistics producer price indexes. (The difference between Census Bureau change in inventories and BEA change in business inventories is the IVA.) Other years except most recent—Inventories from Census Bureau annual surveys, revalued as described above. Most recent year—For retail auto dealers, quantities times average prices from trade sources; for all other, inventories from Census Bureau monthly surveys, revalued as described above.	Same as annual for most recent year.
	Other nonfarm industries (\$5.0)	Inventories revalued to current replacement cost (except when noted as physical quantity times price) as described for manufacturing and trade: For years except most recent, Internal Revenue Service tabulations of business tax returns; for most recent year, Census Bureau quarterly survey of corporations for mining, monthly quantities from the Energy Information Administration combined with Bureau of Labor Statistics producer price indexes for electric utilities, and for all others, judgmental trend.	For electric utilities, same as annual for most recent year; for all others, judgmental trend.
	Farm (\$2.9)	Changes in physical quantities times current prices from Department of Agriculture surveys.	Judgmental projections by BEA and the Department of Agriculture.

See footnotes at end of table.



**Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued**

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other years or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Product side (GDP of \$7,636.0 billion for 1996)—Continued</b>			
<b>Net exports of goods and services</b> (–\$94.8)	Exports and imports of goods, net (–\$191.5)	Estimated as part of the balance of payments accounts: Export and import documents compiled monthly by the Census Bureau with adjustments by BEA for coverage and valuation to convert the data to a balance-of-payments basis. Adjusted for balance-of-payments coverage of U.S. territories and Puerto Rico with data from the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and the Census Bureau, and coverage of gold adjusted with data from the U.S. Geological Survey and trade sources.	For territorial adjustment and coverage of gold, judgmental trend; for all others, same as annual.
	Exports and imports of services, net (\$96.6)	Estimated as part of the balance of payments accounts: For government transactions, reports by Federal agencies on their purchases and sales abroad; for most others in this group (including travel, passenger fares, other transportation, and royalties and license fees), BEA quarterly or annual surveys (supplemented with data from other sources). Adjusted for balance-of-payments coverage of U.S. territories and Puerto Rico, see entry above; adjusted to include financial services furnished without payment, see entry for “imputed—banks, credit agencies, and investment companies” under net interest, and adjusted for NIPA treatment of military grants and labor income.	For territorial adjustment, judgmental trend; for all others, same as annual.
<b>Government consumption expenditures and gross investment</b> (\$1,406.7)	Federal national defense consumption of general government fixed capital (\$57.3)	Perpetual-inventory calculations at current cost, based on gross investment and on investment prices.	Same as annual.
	Federal national defense, except consumption of general government fixed capital (\$295.4)	Within a control total established by fiscal year analysis: For compensation, military wages from the <i>Budget of the United States</i> prepared by the Office of Management and Budget, civilian wages and benefits from the Office of Personnel Management, and employer contributions for social insurance mainly from outlays from <i>Monthly Treasury Statement</i> ; for other than compensation, by type, based mainly on data from Department of Defense reports.	For components of compensation, employment from the Department of Defense (military) and the Bureau of Labor Statistics (civilian); for other than compensation, same as annual.
	Federal nondefense consumption of general government fixed capital (\$11.2)	Perpetual-inventory calculations at current cost, based on gross investment and on investment prices.	Same as annual.

See footnotes at end of table.

Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other years or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Product side</b> (GDP of \$7,636.0 billion for 1996)—Continued			
<b>Government consumption expenditures and gross investment—Continued</b>	Federal nondefense, except consumption of general government fixed capital (\$156.1)	Within a control total established by fiscal year analysis: For Commodity Credit Corporation inventory change, book values of acquisitions and physical quantities of dispositions from agency reports times average market prices from the Department of Agriculture; for financial services furnished without payment, see entry for "imputed—banks, credit agencies, and investment companies" under net interest; for compensation, civilian wages and benefits from the Office of Personnel Management and employer contributions for social insurance mainly from outlays from <i>Monthly Treasury Statement</i> ; for petroleum sales (Naval Petroleum Reserve), distribution and price data from the Department of Energy; for research and development, obligations from the National Science Foundation and disbursements from the National Aeronautics and Space Administration; for construction, value put in place from Census Bureau monthly construction survey; for all other, outlays from <i>Monthly Treasury Statement</i> .	For components of compensation, employment from the Bureau of Labor Statistics; for other than compensation, same as annual.
	State and local compensation of general government employees, except force-account construction (\$547.2)	For wages and salaries, tabulations of wages and salaries of employees covered by State unemployment insurance from the Bureau of Labor Statistics; for employer contributions for social insurance, tabulations from the Social Security Administration, other agencies administering social insurance programs, and Census Bureau surveys of State and local government retirement funds, adjusted to a calendar year basis from a fiscal year basis; for other labor income, trade sources, Health Care Financing Administration, and Census Bureau surveys of State and local governments, adjusted to a calendar year basis from a fiscal year basis.	For wages and salaries, derived from Bureau of Labor Statistics monthly employment times earnings from Bureau of Labor Statistics employment cost index, if available; otherwise, judgmental trend. For other compensation, judgmental trend.
	State and local structures (\$128.5)	Value of construction put in place from Census Bureau monthly construction survey.	Same as annual.
	State and local brokerage charges and financial services furnished without payment (\$13.0)	See entries under personal consumption expenditures for services.	See entries under personal consumption expenditures for services.
	State and local consumption of general government fixed capital (\$56.6)	Perpetual-inventory calculations at current cost, based on gross investment and on investment prices.	Same as annual.
	State and local investment in equipment and consumption expenditures, except compensation, consumption of fixed capital, brokerage charges, and financial services furnished without payment. (\$141.4)	Years except most recent—Total expenditures from Census Bureau quinquennial censuses and annual surveys of State and local governments, selectively replaced with source data that are more appropriate for the NIPA's and adjusted as follows: For coverage; for netting and grossing differences; to a calendar year basis from a fiscal year basis; for other timing differences; to exclude interest, subsidies, net expenditures of government enterprises, and transfer payments; and to exclude compensation and structures. Most recent year—Judgmental trend.	Same as annual for most recent year.

See footnotes at end of table.

Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other years or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Income side</b> (Gross national income of \$7,697.6 billion for 1996)			
<b>Compensation of employees<sup>6</sup></b> (\$4,426.9)	Wage and salary accruals: Private industries (\$2,991.0)	For most industries, annual tabulations of wages and salaries of employees covered by State unemployment insurance from the Bureau of Labor Statistics; for remainder, wages from a variety of sources (such as the Department of Agriculture for farms and the Railroad Retirement Board for railroad transportation), adjusted for understatement of income on tax returns and for several coverage differences.	For most industries, wages and salaries derived from Bureau of Labor Statistics monthly employment times earnings times hours; for others, judgmental trend.
	Wage and salary accruals: Federal Government (\$177.2)	For civilians, wages from the Office of Personnel Management; for military personnel, wages from the <i>Budget of the United States</i> prepared by the Office of Management and Budget.	For civilians, employment from the Bureau of Labor Statistics and judgmental trend; for military personnel, employment from the Department of Defense and judgmental trend.
	Wage and salary accruals: State and local governments (\$465.4)	Mainly tabulations of wages and salaries of employees covered by State unemployment insurance from the Bureau of Labor Statistics.	Derived from Bureau of Labor Statistics monthly employment times earnings from Bureau of Labor Statistics employment cost index, if available, otherwise judgmental trend.
	Employer contributions for social insurance (\$385.7)	Years except most recent—Tabulations from the Social Security Administration and other agencies administering social insurance programs, and Census Bureau surveys of State and local government retirement funds, adjusted to a calendar year basis from a fiscal year basis. Most recent year—Census Bureau surveys of State retirement funds, adjusted to a calendar year basis from a fiscal year basis.	For Federal programs, BEA-derived wages and salaries of employees covered by the programs; for State and local government programs, judgmental trend.
	Other labor income: Group health insurance (\$262.7)	Years except 3 most recent—Total contributions from the Health Care Financing Administration less employee contributions from the Bureau of Labor Statistics consumer expenditure survey. Three most recent years—Employer costs for employee compensation from the Bureau of Labor Statistics.	Judgmental trend.
	Other labor income: Pension and profit-sharing (\$94.8)	Years except 2 most recent—Tabulations from the Department of Labor. Two most recent years—Employer costs for employee compensation from the Bureau of Labor Statistics or Internal Revenue Service tabulations of business tax returns.	Judgmental trend.
	Other labor income: Workers' compensation (\$37.0)	Years except most recent—Employer contributions from trade sources and contributions for self-insured plans from the Social Security Administration. Most recent year—Judgmental trend.	Judgmental trend.
	Other labor income: Group life insurance (7.4)	Years except most recent—Group premiums and estimates of employer share from trade sources. Most recent year—Judgmental trend.	Judgmental trend.

See footnotes at end of table.

**Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued**

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other years or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Income side</b> (Gross national income of \$7,697.6 billion for 1996)—Continued			
<b>Proprietors' income with IVA and CCAAdj</b> (\$520.3)	Farm income with IVA (\$45.0)	Based on Department of Agriculture data on net income, obtained by deriving gross income (cash receipts from marketing, inventory change, government payments, other cash income, and nonmoney income) and subtracting production expenses, adjusted to exclude corporate income from Internal Revenue Service tabulations of business tax returns and adjusted to a NIPA basis.	For crops, BEA quarterly allocation of Department of Agriculture annual projections of crop output; for livestock, Department of Agriculture quarterly projections of cash receipts and inventories; for both crops and livestock, quarterly allocation of Department of Agriculture annual projections of government subsidy payments and production expenses.
	Farm CCAAdj (-\$7.8)	See entry for "CCAAdj" under consumption of fixed capital.	
	Nonfarm income (\$455.3)	Years except most recent—Income from Internal Revenue Service tabulations of business tax returns, adjusted for understatement of income on tax returns and for several conceptual differences. Most recent year—For construction, trade, and services, indicators of activity (such as value of housing put in place); for most others, judgmental trend.	Same as annual for most recent year.
	Nonfarm IVA (-\$0.2)	See entry for "IVA" under corporate profits with IVA and CCAAdj.	
	Nonfarm CCAAdj (\$28.0)	See entry for "CCAAdj" under consumption of fixed capital.	
<b>Rental income of persons with CCAAdj</b> (\$146.3)	Owner-occupied nonfarm housing (\$109.7)	Benchmark years—Derived as space rent (see entry for "nonfarm dwellings" under personal consumption expenditures) less related expenses, including maintenance and repair from Bureau of Labor Statistics quarterly consumer expenditure survey, mortgage interest, and property taxes from Census Bureau decennial survey of residential finance. Other years—Same as benchmark years, except mortgage interest, based on mortgage debt from the Federal Reserve Board times a BEA interest rate, and property taxes from Census Bureau quarterly surveys of State and local tax collections.	For owner-occupied space rent, same as annual; for depreciation, interest, and taxes, based on NIPA estimates of those components; for other expenses, judgmental trend.
	Tenant-occupied nonfarm housing (\$52.7)	Same as owner-occupied nonfarm housing, adjusted to cover only rental income accruing to persons not primarily engaged in the real estate business.	Same as annual.
	Farms owned by nonoperator landlords (\$6.8)	Prepared in conjunction with farm proprietors' income; see entry for "farm income with IVA" under proprietors' income with IVA and CCAAdj.	Judgmental trend.
	Nonfarm nonresidential properties (\$15.8)	Years through 1983—Rents paid and received by business and government, adjusted for expenses associated with property (mainly depreciation, taxes, interest, and repairs) from Internal Revenue Service tabulations of business tax returns, Census Bureau surveys, and the <i>Budget of the United States</i> prepared by the Office of Management and Budget. Other years—Judgmental trend.	Judgmental trend.
	Royalties (\$8.3)	Years except most recent—Internal Revenue Service tabulations of royalties reported on individual income tax returns. Most recent year—Judgmental trend.	Same as annual for most recent year.
	CCAAdj (-\$47.0)	See entry for "CCAAdj" under consumption of fixed capital.	

See footnotes at end of table.

**Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued**

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other years or used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Income side</b> (Gross national income of \$7,697.6 billion for 1996)—Continued			
<b>Corporate profits with IVA and CCAAdj</b> (\$735.9)	Domestic profits before tax (\$580.7)	Years except most recent—Receipts less deductions from Internal Revenue Service tabulations of business tax returns, adjusted for understatement of income on tax returns and for several conceptual differences. Most recent year—Profits from Census Bureau quarterly survey of corporate profits, regulatory agency reports, and compilations of publicly available corporate financial statements.	For some industries in transportation and some in finance, etc., judgmental trend; for others, same as annual for most recent year. (Released at time of preliminary estimate of GDP for the first, second, and third quarters and of final estimate for the fourth quarter.)
	Rest-of-the-world profits before tax (\$95.9)	Estimated as part of the balance of payments accounts: For direct investment income, BEA surveys; for portfolio income, Treasury Department surveys. Adjusted for NIPA coverage of U.S. territories and Puerto Rico—see entry for “exports and imports of goods, net,” under net exports of goods and services.	Same as annual. (Released on same schedule as domestic profits before tax.)
	IVA (-\$2.5)	The IVA on the income side (for corporations and for nonfarm sole proprietorships and partnerships) and the IVA on the product side (described under the entry for change in business inventories) differ because the source data reflect different proportions of accounting methods (last-in, first-out (LIFO), etc.) underlying reported inventories. The income-side IVA is based on the product-side IVA, adjusted by the relationship between non-LIFO inventories from Internal Revenue Service tabulations of business tax returns and non-LIFO inventories from the Census Bureau.	Same as annual.
	CCAAdj (\$61.8)	See entry for “CCAAdj” under consumption of fixed capital.	
<b>Net interest</b> (\$425.1)	Domestic monetary, net (\$87.6)	Years except most recent—For farm interest paid, Department of Agriculture surveys; for residential mortgage interest paid, Census Bureau decennial residential finance survey and mortgage debt from the Federal Reserve Board times a BEA interest rate; for most other interest paid and received by business, Internal Revenue Service tabulations of business tax returns, adjusted for misreporting on tax returns and for several conceptual differences. Most recent year—For farm and mortgage interest paid, same as other years; for other interest, interest receipts and payments from regulatory agencies (such as the Federal Deposit Insurance Corporation), from trade sources, or obtained by applying BEA interest rates to interest-bearing assets/liabilities from Federal Reserve Board flow-of-funds accounts.	Derived by combining estimates of (1) interest received by persons, (2) government interest paid and received, and (3) interest paid by persons. For (1), judgmental trend; for (2), <i>Monthly Treasury Statement</i> for Federal and judgmental trend for State and local; for (3), consumer debt from the Federal Reserve Board times BEA estimates of interest rates. (Released on same schedule as domestic profits before tax.)
	Rest-of-the-world monetary, net (-\$76.4)	Estimated as part of the balance of payments accounts: For direct investment income, BEA surveys; for portfolio income, Treasury Department surveys. Adjusted for NIPA coverage of U.S. territories and Puerto Rico—see entry for “exports and imports of goods, net,” under net exports of goods and services.	Same as annual. (Released on same schedule as domestic profits before tax.)

See footnotes at end of table.

**Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued**

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other final years or, for other years, used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Income side</b> (Gross national income of \$7,697.6 billion for 1996)—Continued			
<b>Net interest—</b> Continued	Imputed—banks, credit agencies, and investment companies (\$180.1)	Property income earned on investment of deposits and monetary interest paid to depositors (and for mutual depositories, profits from Internal Revenue Service tabulations of business tax returns) from annual reports of regulatory agencies and the Federal Reserve Board. Imputed interest (financial services furnished without payment) is allocated to persons, government, and the rest of the world on the basis of deposit liabilities from the same sources.	Judgmental trend.
	Imputed—life insurance carriers and private non-insured pension plans (\$233.7)	Property income earned (and for life insurance carriers, profits) from Internal Revenue Service tabulations of business tax returns, trade sources, and the Federal Reserve Board.	Judgmental trend. (Released on same schedule as domestic profits before tax.)
<b>Business transfer payments</b> (\$33.6)		Payments to persons: For charitable contributions, for years except most recent, Internal Revenue Service tabulations of business tax returns or, for most recent year, judgmental trend; for other components (such as liability payments for personal injury), for years except most recent, information from government agency reports and trade sources or, for most recent year, judgmental trend. Payments to the rest of the world: Estimated as part of the balance of payments accounts.	Judgmental trend.
<b>Indirect business tax and nontax liability</b> (\$604.8)	Federal Government (\$95.8)	For excise taxes, collections from the Bureau of Alcohol, Tobacco, and Firearms and the Internal Revenue Service; for customs duties, receipts from <i>Monthly Treasury Statement</i> ; and for nontaxes (such as fines), receipts from the <i>Budget of the United States</i> prepared by the Office of Management and Budget.	For customs duties, <i>Monthly Treasury Statement</i> ; for most excise taxes, derived from indicators of activity (such as gasoline production for gasoline tax); for others in this group, judgmental trend.
	State and local governments (\$508.9)	Receipts from Census Bureau quinquennial censuses and annual and quarterly surveys, adjusted to a calendar year basis from a fiscal year basis.	Judgmental trend.
<b>Subsidies less current surplus of government enterprises</b> (\$25.4)	Federal Government (\$37.7)	For subsidies, payments by the Commodity Credit Corporation from agency reports and, for most other agencies, outlays from <i>Monthly Treasury Statement</i> ; for current surplus, mainly reports of various agencies, such as the Postal Service, and consumption of fixed capital estimates derived with perpetual-inventory calculations at current cost, based on gross investment and on investment prices.	For subsidies, Commodity Credit Corporation reports and judgmental trend; for current surplus, judgmental trend and consumption of fixed capital estimates derived with perpetual-inventory calculations at current cost, based on gross investment and on investment prices.
	State and local governments (–\$12.3)	For subsidies, limited to railroad, Census Bureau annual surveys of expenditures, adjusted to a calendar year basis from a fiscal year basis. For current surplus: For current operating receipts, mainly revenue data from Census Bureau annual surveys of State and local governments, adjusted to a calendar year basis from a fiscal year basis; for current operating expenditures, see entries (1) for “State and local investment in equipment and consumption expenditures, except compensation, consumption of fixed capital, brokerage charges, and financial services furnished without payment” and (2) for “State and local consumption of general government fixed capital” under Government consumption expenditures and gross investment.	Judgmental trend.

See footnotes at end of table.

**Table 1.—Principal Source Data and Estimating Methods Used in Preparing Estimates of Current-Dollar GDP—Continued**

Component (billions of dollars)	Subcomponent (billions of dollars)	Annual estimates: Source data and methods used to determine level for benchmark and other final years or, for other years, used to prepare an extrapolator or interpolator	Advance quarterly estimates: Source data and methods used to prepare an extrapolator
<b>Income side</b> (Gross national income of \$7,697.6 billion for 1996)—Continued			
<b>Consumption of fixed capital</b> (\$830.1)	<b>Government:</b> (\$147.4)		
	General government (\$125.1)	Perpetual-inventory calculations at current cost, based on gross investment and on investment prices.	Same as annual.
	Government enterprise (\$22.3)	Perpetual-inventory calculations at current cost, based on gross investment and on investment prices.	Same as annual.
	<b>Private:</b> (\$682.7)	Perpetual-inventory calculations at current cost, based on gross investment and on investment prices.	Same as annual.
	Capital consumption allowances (\$709.9)	Years except most recent—For depreciation of corporations and of nonfarm sole proprietorships and partnerships, Internal Revenue Service tabulations of business tax returns, adjusted for several conceptual differences; for other depreciation (including noncorporate farms, nonprofit institutions, and owner-occupied houses), perpetual-inventory calculations; for accidental damage to fixed capital, losses reported to insurance companies and government agencies. Most recent year—For depreciation of corporations and nonfarm sole proprietorships and partnerships, BEA estimates of tax-return-based depreciation; for other depreciation and accidental damage to fixed capital, same as other years.	Judgmental trend.
	Less: CCA <sub>adj</sub> (\$27.1)	For corporations and nonfarm sole proprietorships and partnerships, the difference between tax-return-based calculations and perpetual-inventory calculations; for other (including noncorporate farms, nonprofit institutions, and owner-occupied houses), the difference between perpetual-inventory calculations at historical cost and current cost.	Judgmental trend.

1. Includes \$10.6 billion for food produced and consumed on farms, standard clothing issued to military personnel, and used trucks.

2. The retail-control method cited under "personal consumption expenditures (PCE) for most goods" is based on retail trade sales data that include sales of gasoline service stations. Estimates of PCE for gasoline and oil are derived separately and are deducted from the retail-control totals (that include goods sold by gasoline service stations) to derive the estimates for "PCE for most goods."

3. Also referred to as "services furnished without payment by financial intermediaries, except life insurance carriers and private noninsured pension plans."

4. Includes \$0.5 billion for brokers' commissions on sale of structures and net purchases of used

structures.

5. Includes -\$1.0 billion for other structures (dormitories, fraternity and sorority houses, nurses' homes, etc.) and net purchases of used structures.

6. Includes -\$2.6 billion for wage and salary accruals: Rest of the world, net, and \$5.4 billion for other labor income: Supplemental unemployment, directors' fees, and judicial fees.

CCA<sub>adj</sub> Capital consumption adjustment

IVA Inventory valuation adjustment

NIPA National income and product account

Source: 1996 estimates—SURVEY OF CURRENT BUSINESS, August 1997.

Table 2.—Methodology Used in Preparing Estimates of Real GDP

Component	Subcomponent	Deflation, using price based on—		Using quantity for—	
		Components of the Consumer Price Index (CPI) or the Producer Price Index (PPI)	Other	Extrapolation	Direct valuation
<b>Personal consumption expenditures</b>	<b>Durable and nondurable goods:</b>				
	Most goods (except sub-components listed separately).	Except as noted, CPI; military clothing, PPI.	Computers, BEA price index, Bureau of Labor Statistics import price indexes, and PPI.		
	New autos .....	CPI			Used autos, in two parts: (1) Margin, unit sales from trade sources with dealer margins from Census Bureau and trade sources; (2) net transactions, net change in unit stock of autos held by consumers by year of original sale, valued by depreciated original value in base-year dollars.
	Net purchases of used autos.	.....	.....	.....	
	<b>Services:</b>				
	Nonfarm dwellings—space rent for owner-occupied and rent for tenant-occupied.	CPI			
	Rental value of farm dwellings.	.....	.....	Net value of farm housing stock from BEA capital stock series.	

See footnotes at end of table.



Table 2.—Methodology Used in Preparing Estimates of Real GDP—Continued

Component	Subcomponent	Deflation, using price based on—		Using quantity for—	
		Components of the Consumer Price Index (CPI) or the Producer Price Index (PPI)	Other	Extrapolation	Direct valuation
<b>Personal consumption expenditures—</b> Continued	<b>Services—Continued:</b>				
	Motor vehicle and other repair, other purchased intercity transportation, legal and funeral services, barbershops and beauty parlors, nursing homes, laundries, employment agency fees, accounting and tax return preparation services, recreation (except cable TV, casino gambling, parimutuel net receipts, and lotteries), hotels and motels, and other education and research.	Except as noted, CPI; private for-profit nursing homes, PPI.	Private nonprofit nursing homes, composite index of input prices from the Health Care Financing Administration; clubs and fraternal organizations, and other education and research, BEA composite index of input prices.		
	Physicians, dentists, and other professional medical services.	Except as noted, CPI; physicians, PPI.			
	Private nursery, elementary, and secondary schools, day care, welfare activities, and trade unions and professional associations.	.....	BEA composite indexes of input prices.		
	Public education and hospitals, water and other sanitary services, and lotteries.	Except as noted, CPI; public hospitals, PPI.			
	Financial services furnished without payment by banks, credit agencies, and investment companies. <sup>1</sup>	.....	.....	Paid employee hours of relevant financial institutions.	
	Brokerage charges and investment counseling, bank service charges, intercity transportation except other, and private higher education.	Except as noted, CPI.	Airline transportation, BEA index based on revenue per passenger mile from the Department of Transportation and trade source, and CPI for airline fares; private higher education, BEA composite index of input prices.	Stock brokerage charges, BEA orders, derived from volume data from the Securities and Exchange Commission and trade sources.	
	Domestic services .....	CPI			

See footnotes at end of table.

Table 2.—Methodology Used in Preparing Estimates of Real GDP—Continued

Component	Subcomponent	Deflation, using price based on—		Using quantity for—	
		Components of the Consumer Price Index (CPI) or the Producer Price Index (PPI)	Other	Extrapolation	Direct valuation
<b>Personal consumption expenditures—</b> Continued	<b>Services—Continued:</b>				
	Insurance, private hospitals, religious activities, cable TV, utilities, and local transport.	Except as noted, CPI; private for-profit hospitals, PPI.	Life insurance and religious activities, BEA composite indexes of input prices; private nonprofit hospitals, composite index of input prices from the Health Care Financing Administration.	Auto insurance, premiums deflated by CPI; health insurance, benefits deflated by CPI.	
	Foreign travel by U.S. residents less expenditures in the United States by nonresidents.	Expenditures in the United States, CPI.	Foreign travel, BEA composite index of foreign consumer price indexes (exchange-rate adjusted).		
	Other services: Casino gambling, and parimutuel net receipts; other housing except hotels and motels; bridge, etc., tolls; other household operation except repairs and insurance; travel and entertainment card fees; stenographic and reproduction services; and money orders and classified advertising.	Except as noted, CPI.	.....	Parimutuel net receipts, gross winnings deflated by CPI.	
<b>Fixed investment</b>	<b>Nonresidential structures:</b>				
	Utilities .....	Gas and petroleum pipelines, PPI.	Telecommunications, cost index from trade source; railroads, BEA price index; other, cost indexes from government agencies and trade sources.		
	Mining exploration, shafts, and wells.	Casing, PPI .....	Exploration, cost index from trade source; mines, implicit price deflator for nonfarm nonresidential buildings.	Drilling, footage by geographic area from trade source.	
	Nonfarm buildings and structures.	.....	Buildings, BEA index based on cost index from trade source and on Census Bureau price deflator for single-family houses under construction; structures, cost indexes from government agencies.		
	Farm buildings .....	.....	Implicit price deflator for nonfarm nonresidential buildings.		

See footnotes at end of table.

Table 2.—Methodology Used in Preparing Estimates of Real GDP—Continued

Component	Subcomponent	Deflation, using price based on—		Using quantity for—	
		Components of the Consumer Price Index (CPI) or the Producer Price Index (PPI)	Other	Extrapolation	Direct valuation
Fixed investment— Continued	<b>Nonresidential producers' durable equipment:</b>				
	Equipment, except autos, telephone and telegraph installation, and telephone switching equipment.	Domestic components, except as noted, PPI; imported transportation equipment, PPI.	Imported components, except computers and transportation equipment, Bureau of Labor Statistics import price indexes; domestic and imported computers, BEA price index, Bureau of Labor Statistics import price indexes, and PPI.		
	New and used autos .....	New autos, CPI.	.....	.....	Used autos, in two parts: (1) Margin, unit sales from trade sources with dealer margins from Census Bureau and trade sources; (2) net transactions, net change in unit stock of autos held by business by year of original sale, valued by depreciated original value in base-year dollars.
	Telephone and telegraph installation.	.....	BEA cost index.		
	Telephone switching equipment.	.....	BEA price index.		
	<b>Residential investment:</b>				
	Permanent-site new single-family housing units.	.....	Census Bureau price deflator for single-family houses under construction.		
	Permanent-site new multi-family housing units.	.....	BEA price index.		
	Mobile homes .....	PPI			
	Improvements .....	Major replacements, CPI.	Additions and alterations, BEA index based on Census Bureau price deflator for single-family houses under construction and CPI component.		
	Brokers' commissions .....	.....	.....	Numbers of new and used houses sold from Census Bureau and trade sources.	
	Producers' durable equipment.	CPI			

See footnotes at end of table.

Table 2.—Methodology Used in Preparing Estimates of Real GDP—Continued

Component	Subcomponent	Deflation, using price based on—		Using quantity for—	
		Components of the Consumer Price Index (CPI) or the Producer Price Index (PPI)	Other	Extrapolation	Direct valuation
<b>Change in business inventories</b>	Nonfarm: Purchased goods, all industries.	Except as noted, PPI.	Crude petroleum, index from the Energy Information Administration; computers, BEA price index, Bureau of Labor Statistics import price indexes, and PPI; imported goods purchased by trade industries, Bureau of Labor Statistics import price indexes.	.....	Quantities and prices of stocks of coal, petroleum, and natural gas for utilities from the Energy Information Administration.
	Nonfarm: Work-in-process and finished goods, manufacturing.	Except as noted, PPI; some overhead cost items, CPI.	BEA indexes of unit labor cost.		
	Farm .....	.....	Department of Agriculture average market prices..		
<b>Net exports of goods and services <sup>2</sup></b>	Exports and imports of goods. <sup>2</sup>	Gold; transportation equipment; selected agricultural foods, feeds, and beverages; and selected imports of refined petroleum, PPI.	Bureau of Labor Statistics export and import price indexes; electric energy exports and imports, and petroleum imports, unit-value indexes based on Census Bureau values and quantities; computer and semiconductor exports, BEA price indexes and PPI; computer and semiconductor imports, BEA price indexes and Bureau of Labor Statistics import price indexes.		
	Exports and imports of services. <sup>2</sup>	Travel receipts, medical receipts, and students' expenditures, CPI; freight and port expenditures and telecommunications, PPI.	Military transfers and direct defense expenditures abroad, selected deflators for Federal national defense, except consumption of fixed capital (see below); passenger fares, Bureau of Labor Statistics export and import price indexes; travel payments and U.S. Government payments for miscellaneous services, BEA composite index of foreign consumer price indexes (exchange-rate adjusted); royalties and fees, and other private services, implicit price deflator for final sales to domestic purchasers.	Exports of financial services furnished without payment, <sup>1</sup> paid employee hours of relevant financial institutions.	

See footnotes at end of table.

Table 2.—Methodology Used in Preparing Estimates of Real GDP—Continued

Component	Subcomponent	Deflation, using price based on—		Using quantity for—	
		Components of the Consumer Price Index (CPI) or the Producer Price Index (PPI)	Other	Extrapolation	Direct valuation
<b>Government consumption expenditures and gross investment</b>	Federal national defense consumption of general government fixed capital.	.....	.....	.....	Perpetual-inventory calculations, based on gross investment.
	Federal national defense, except consumption of general government fixed capital.	Selected goods, PPI; utilities and communications, CPI and PPI.	Some goods, some services, and most military structures, BEA indexes based on Department of Defense prices paid; some services, Bureau of Labor Statistics monthly earnings; computers, BEA price index, Bureau of Labor Statistics import price indexes, and PPI; non-military structures, cost indexes from trade sources and government agencies.	Military compensation, full-time equivalent employment by rank and length of service; civilian compensation, full-time equivalent employment by grade, adjusted for change from base year in hours worked.	Many goods, some services, and a few military structures, quantities and prices from Department of Defense reports; electricity and natural gas quantities from the Department of Energy.
	Federal nondefense consumption of general government fixed capital.	.....	.....	.....	Perpetual-inventory calculations, based on gross investment.
	Federal nondefense, except consumption of general government fixed capital.	Most goods, PPI; rent, utilities, and communications, CPI.	Structures, cost indexes from trade sources and government agencies; computers, BEA price index, Bureau of Labor Statistics import price indexes, and PPI; most services, Bureau of Labor Statistics monthly earnings.	Compensation, full-time equivalent employment by grade, adjusted for change from base year in hours worked; financial services furnished without payment, <sup>1</sup> paid employee hours of relevant financial institutions.	Net purchases of agricultural commodities by the Commodity Credit Corporation, quantities by crop from agency reports with Department of Agriculture prices; selected petroleum transactions, quantities and prices from the Department of Energy.
	State and local compensation of general government employees.	.....	.....	Employees in education, full-time equivalent employment by education and experience, adjusted for change from base year in hours worked; other employees, full-time equivalent employment, adjusted for change from base year in hours worked.	
	State and local structures.	.....	Cost indexes from trade sources and government agencies.		

See footnotes at end of table.

**Table 2.—Methodology Used in Preparing Estimates of Real GDP—Continued**

Component	Subcomponent	Deflation, using price based on—		Using quantity for—	
		Components of the Consumer Price Index (CPI) or the Producer Price Index (PPI)	Other	Extrapolation	Direct valuation
<b>Government consumption expenditures and gross investment—</b> Continued	State and local brokerage charges and financial services furnished without payment.	.....	See entries under personal consumption expenditures for services.		
	State and local consumption of general government fixed capital.	.....	.....	.....	Perpetual-inventory calculations, based on gross investment.
	State and local investment in equipment and consumption expenditures, except compensation, consumption of fixed capital, brokerage charges, and financial services furnished without payment.	Services, except as noted, and goods used in maintenance and repair, CPI; goods, except as noted, and electricity, PPI.	Transportation, books, and postal services, BEA indexes based on Department of Defense prices paid; computers, BEA price index, Bureau of Labor Statistics import price indexes, and PPI.		

1. Also referred to as "services furnished without payment by financial intermediaries, except life insurance carriers and private noninsured pension plans."

2. Estimates of real exports and imports of goods and services are prepared separately. Real receipts and payments of factor income from the rest of the world—the difference between GDP

and GNP—are prepared by deflation using the implicit price deflator for final sales to domestic purchasers except for imputed interest paid to nonresidents, which is prepared by extrapolation using paid employee hours of relevant institutions.